

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

ABSTRACT

A rotatably alternating vane-piston internal combustion engine comprising a cylindrical casing inside which alternates a rotor comprising two or more radially extending vanes affixed to a shaft; said shaft rotatably mounted within the casing upon two end plates affixed to the cylindrical chamber of the casing thus effectively closing it. Two longitudinally extending walls unitary with or affixed inside the chamber of the casing. Sealing strips provided between said walls and the shaft and between the vanes, the casing and the end plates respectively. The casing and the end plates equipped with plurality of ports which communicate with interior chambers formed between the vanes and the walls. The ports allowing for intake of combustible fuel-air mixture and the exhaust thereafter. Four ignition means delivering a spark at the end of the stroke. An extendable connecting rod assembly converting the oscillating bi-directional rotary motion of the alternating piston "output shaft" into a continuous uni-directional motion of the main shaft. Said connecting rod attached to a slot on the flywheel and changeable in length to extend or contract allowing a change of the length of the stroke for better compression inside the working chamber.